

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A method, comprising:

requesting access to a resource for a first process, the first process having a corresponding first semaphore;

determining whether the resource is being accessed by a second process, the second process having a corresponding second semaphore; and

denying the first process access to the resource if the resource is being accessed by the second process as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore.

2. (Previously Presented) The method of claim 1, further comprising the first process having a corresponding first local priority and the second process having a corresponding second local priority.

3. (Previously Presented) The method of claim 1, further comprising:

granting the first process access to the resource if the resource is not being accessed by the second process as indicated at the second semaphore.

Claims 4-23 (Cancelled)

24. (Currently Amended) A machine-readable medium having stored thereon data representing sets of instructions which, when executed by a machine, cause the machine to:

request access to a resource for a first process, the first process having a corresponding first semaphore;

determine whether the resource is being accessed by a second process, the second process having a corresponding [[first]] second semaphore; and

deny the first process access to the resource if the resource is being accessed by the second process [[a]] as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore.

25. (Previously Presented) The machine-readable medium of claim 24, further comprising the first process having a corresponding first local priority and the second process having a corresponding second local priority.

26. (Previously Presented) The machine-readable medium of claim 24, wherein the sets of instruction which, when executed by the machine, further cause the machine to:

grant the first process access to the resource if the resource is not being accessed by the second process as indicated at the second semaphore.

27. (Previously Presented) An apparatus, comprising:

a central processing unit having a processor to execute a plurality of processes including a first process and a second process; and

the processor is further to

request access to a resource for the first process, the first process having a corresponding first semaphore;

determine whether the resource is being accessed by the second process, the second process having a corresponding second semaphore; and

deny the first process access to the resource if the resource is being accessed by the second process as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore.

28. (Previously Presented) The apparatus of claim 27, further comprising the first process having a corresponding first local priority and the second process having a corresponding second local priority.
29. (Previously Presented) The apparatus of claim 27, wherein the processor is further to grant the first process access to the resource if the resource is not being accessed by the second process as indicated at the second semaphore.

Claims 30-32 (Cancelled)

33. (Previously Presented) The method of claim 2, further comprising:
  - determining if access to the resource is simultaneously being requested by the second process; and
  - granting access to the resource to one of the first process and the second process having a higher local priority of the first local priority and the second local priority.
34. (Previously Presented) The machine-readable medium of claim 25, wherein the sets of instructions which, when executed by the machine, further cause the machine to:

determine if access to the resource is simultaneously being requested by the second process; and

grant access to the resource to one of the first process and the second process having a higher local priority of the first local priority and the second local priority.

35. (Previously Presented) The apparatus of claim 28, wherein the processor is further to:

determine if access to the resource is simultaneously being requested by the second process; and

grant access to the resource to one of the first process and the second process having a higher local priority of the first local priority and the second local priority.

36. (Previously Presented) A system, comprising:

a memory having a plurality of resources being accessed by a plurality of processes, and a plurality of semaphores associated with the plurality of processes; and

a processor coupled with the memory, wherein the processor is capable of executing the plurality of processes, the processor is further to

request access to a resource for a first process of the plurality of processes, the first process having a corresponding first semaphore of the plurality of semaphores;

determine whether the resource is being accessed by a second process of the plurality of processes, the second process having a corresponding second semaphore of the plurality of semaphores; and

deny the first process access to the resource if the resource is being accessed by the second process as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore.

37. (Previously Presented) The system of claim 36, further comprising the first process having a corresponding first local priority and the second process having a corresponding second local priority.
38. (Previously Presented) The system of claim 36, wherein the processor is further to grant the first process access to the resource if the resource is not being accessed by the second process as indicated at the second semaphore.
39. (Previously Presented) The system of claim 37, wherein the processor is further to:

determine if access to the resource is simultaneously being requested by the second process; and

grant access to the resource to one of the first process and the second process having a higher local priority of the first local priority and the second local priority.